Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 (currently amended). A supported lattice for cultivating living cells to form living tissue, said supported lattice comprising:

a first support substrate comprising a first elongated tube formed of a plurality of first resilient filamentary members interlaced together, said first resilient filamentary members being interlaced to form a first mesh defined by interstices that are large compared with said living cells such that said cells do not bridge said interstices; ~~and~~

a first cell cultivation lattice comprising a plurality of first flexible filamentary members interlaced with one another and said first resilient filamentary members, said first flexible filamentary members being interlaced to form a second mesh defined by interstices smaller than the interstices formed by the first resilient filamentary members and adapted for growing cells in a two-dimensional array across said large interstices of said first support substrate to form a first substantially continuous surface comprising said living tissue;

said supported lattice further comprising a second elongated tube positioned coaxially within said first elongated tube, said second elongated tube comprising:

a second support substrate comprising a plurality of second resilient filamentary members interlaced together, said second resilient filamentary members being interlaced to form a third mesh defined by interstices that

are large compared with said living cells such that said cells do not bridge said interstices; and

a second cell cultivation lattice comprising a plurality of second flexible filamentary members interlaced with one another and said second resilient filamentary members, said second flexible filamentary members being interlaced to form a fourth mesh defined by interstices smaller than the interstices formed by the second resilient filamentary members and adapted for growing cells in a two-dimensional array across said large interstices of said second support substrate to form a second substantially continuous surface comprising said living tissue.

Claim 2 (canceled).

3 (currently amended). A supported lattice according to Claim ~~2~~ 1, wherein said resilient and said flexible filamentary members are interlaced by braiding.

4 (currently amended). A supported lattice according to Claim ~~2~~ 1, wherein said interstices between said first flexible filamentary members have an average size between about 60 microns and about 80 microns.

5 (currently amended). A supported lattice according to Claim ~~2~~ 1, wherein said first resilient filamentary members comprise monofilaments selected from the group consisting of stainless steel, nitinol and elgiloy monofilaments.

6 (currently amended). A supported lattice according to Claim 5, wherein said first flexible filamentary members comprise multi-filament yarns.

7 (previously presented). A supported lattice according to Claim 6, wherein said multi-filament yarns are elastic.

8 (previously presented). A supported lattice according to Claim 7, wherein said multi-filament yarns comprise textured yarns.

9 (previously presented). A supported lattice according to Claim 8, wherein said multi-filament yarns are selected from the group consisting of polyester, polytetrafluoroethylene, polypropylene and polyethylene.

Claim 10 (canceled).

11 (currently amended). A supported lattice according to Claim ~~10~~ 1, wherein said interstices of said first ~~named~~ cell cultivation lattice have an average size between about 120 microns and about 150 microns and said interstices of said second cell cultivation lattice have an average size between about 60 microns and about 80 microns.

12 (currently amended). A supported lattice according to Claim ~~10~~ 1, further comprising a plurality of elongated filamentary bonding members interlaced with said resilient filamentary members comprising one of said elongated tubes, said filamentary bonding members having a relatively low melting point and being heat fused to said resilient filamentary members comprising said tubes, thereby joining said tubes to one another.

Claim 13 (canceled).

14 (previously presented). A supported lattice according to Claim 15, wherein filaments comprising said multi-filament yarns assume said buckled configuration independently of one another thereby forming relatively small interstices between said filaments.

15 (currently amended). A supported lattice according to Claim 3, wherein said first resilient filamentary members comprise a heat shrinkable material having a relatively low melting point and said first flexible filamentary members comprise multi-filament yarns of a dimensionally stable material having a relatively higher melting point, said multi-filament yarns being in a buckled configuration inwardly and outwardly from said first support substrate thereby forming dimples in said lattice, said dimples being located within said relatively large interstices between said first resilient filamentary members, said first resilient filamentary members being heat fused to one another and to said first flexible filamentary members at points of mutual contact, thereby locking said first flexible filamentary members in said buckled configuration.

16 (currently amended). A supported lattice according to Claim 15, wherein said first resilient filamentary members comprise polypropylene and said first flexible filamentary members comprise polytetrafluoroethylene.

17 (currently amended). A supported lattice according to Claim ~~2~~ 1, wherein said first resilient and said first flexible filamentary members comprise bio-absorbable material selected from the group consisting of polylactic acid, polyglycolic acid and hydroxyacetic acid, said first resilient

filamentary members having a relatively larger denier than said first flexible filamentary members.

18 (currently amended). A supported lattice according to Claim 1, wherein said first resilient filamentary members comprise monofilaments selected from the group consisting of stainless steel, nitinol and elgiloy monofilaments.

19 (currently amended). A supported lattice according to Claim 18, wherein said first flexible filamentary members comprise multi-filament yarns.

Claims 20-23 (canceled).